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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,402	06/14/2001	Tetsuya Kagawa	2271/65101	8499
7590 09/23/2008				
Ivan S. Kavrukov Cooper & Dunham LLP 1185 Avenue of the Americas New York, NY 10036			EXAMINER MENBERU, BENIYAM	
			ART UNIT	PAPER NUMBER
			2625	
			MAIL DATE	DELIVERY MODE
			09/23/2008 PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/881,402

Applicant(s)

KAGAWA, TETSUYA

Examiner

BENIYAM MENBERU

Art Unit

2625

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8, 9, 13, 14, 17, 19-21, 30, 31, 35, 36, 39, 41-43, 52, 53, 57, 58, 61, 63-65 and 82-108 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/15/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Disposition of Claims: Claims pending in the application are 8,9,13,14,17,19-21,30,31,35,36,39,41-43,52,53,57,58,61,63-65 and 82-108.

Response to Arguments

1. Applicant's arguments, see Remarks, filed June 18, 2008, with respect to the rejection(s) of claim(s) 8, 9, 30, 31, 52, 53, and 107 under U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 5552901 to Kikuchi et al have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 6529286 to King.
2. Applicant's arguments, see Remarks, filed June 18, 2008, with respect to the rejection(s) of claim(s) 13, 14, 35, 36, 57, and 58 under U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6816911 to Toyoda et al further in view of U.S. Patent No. 5552901 to Kikuchi et al have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 6529286 to King.
3. Applicant's arguments, see Remarks, filed June 18, 2008, with respect to the rejection(s) of claim(s) 17, 20, 39, 42, 61, and 64 under U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6493103 to Toyoda et al have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 6529286 to King.
4. Applicant's arguments, see Remarks, filed June 18, 2008, with respect to the rejection(s) of claim(s) 21, 43, 65 under U.S. Patent No. 6940615 to Shima in view of

U.S. Patent No. 6333789 to Shima further in view of U.S. Patent No. 5552901 to Kikuchi et al have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 6529286 to King.

5. Applicant's arguments, see Remarks, filed June 18, 2008, with respect to the rejection(s) of claim(s) 82, 84, 90, 92, 98, and 100 under U.S. Patent No. 6940615 to Shima have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 6529286 to King.

6. Applicant's arguments, see Remarks, filed June 18, 2008, with respect to the rejection(s) of claim(s) 85, 86, 93, 94, 101, and 102 under U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6816911 to Toyoda et al have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 6529286 to King.

7. Applicant's arguments, see Remarks, filed June 18, 2008, with respect to the rejection(s) of claim(s) 87, 88, 95, 96, 103, and 104 under U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6493103 to Toyoda et al have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 6529286 to King.

8. Applicant's arguments, see Remarks, filed June 18, 2008, with respect to the rejection(s) of claim(s) 89, 97, and 105 under U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6333789 to Shima have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 6529286 to King.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 82, 84, 90, 92, 98, and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6529286 to King.

Regarding claim 82, Shima discloses a communications terminal apparatus comprising:

a communications mechanism configured to perform communications with a plurality of communications machines including a sending communications machine and a transfer communications machine (column 17, lines 14-26; column 18, lines 1-21; The Host reads on a sending machine, the high-function printer (figure 4) or reference 11 in figure 5 reads on the communication terminal apparatus, the low-function printers in Figure 4 or reference 13, 14 in Figure 5 read on transfer machines.);

a registering mechanism configured to receive (column 18, lines 59-67; "IP address"; column 23, lines 61-67; column 24, lines 1-9; The printer 51 stores the setting information (i.e. registering) of transfer communication machines (printers 52, 53,) which reads on communication capability of printers (52, 53,));

a notifying mechanism configured to notify of said communications capability of said transfer communications machine registered in said registering mechanism (Figure 12, 13; Host 54 is sending machine, 51 is communication terminal apparatus; 52, 53 ... are transfer machines; column 23, lines 61-67; column 24, lines 1-19; the attribute reads on capability; since printer 51 sends attributes of the other printers to the host ("sending machine") the communication capability of the transfer machines are notified to the host. Thus the host is notified of the attributes of the other transfer printers 52, 53...); and

a controlling mechanism (column 23, lines 47-52; "first processing function" reads on mechanism for notifying sending ("host") machine.) configured to instruct said notifying mechanism to notify said sending communications machine of said communications capability (column 24, lines 13-34;) and to instruct said communications mechanism to transfer image (column 12, lines 50-64) information received from said sending communications machine to said transfer communications machine using said address stored in said registering mechanism (column 24, lines 40-60; column 18, lines 59-67; column 19, lines 1-8; The printer 51 transfers print data from host 54 ("sending machine") to transfer printers 52, 53,...), and

wherein said controlling mechanism is configured to obtain a latest communications capability through said communications mechanism when transferring said image information and to update said registration mechanism with said latest communications capability (column 23, lines 63-67; column 24, lines 1-11, 19-34; The attribute is checked at different time ("regular intervals") thus enabling of getting the latest communication capability from the printers. The attributes are stored (column 24, lines 27-28) which implies that registration is updated with the latest capability.). However Shima '615 does not disclose wherein notifying communications capability is at a beginning of communications of image information.

King '286 discloses wherein notifying communications capability is at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407).

Having the system of **Shima '615** and then given the well-established teaching of **King '286**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **King '286**, since **King '286** stated in col. 2, Lines 45-55, such a modification would provide a productive and optimized printing system.

Regarding claim 84, see the rejection of corresponding claim 82. Further Shima discloses obtaining latest capability at intervals of a predetermined time period (column

24, lines 23-34; The attribute is checked at different time ("regular intervals") thus enabling of getting the latest communication capability from the printers.).

Regarding claim 90, see rejection of claim 82 as shown above.

Regarding claim 92, see the rejection of corresponding claim 82. Further Shima discloses obtaining latest capability at intervals of a predetermined time period (column 24, lines 23-34; The attribute is checked at different time ("regular intervals") thus enabling of getting the latest communication capability from the printers.).

Regarding claim 98, see the rejection of corresponding claims 82. Further King '286 discloses notifying a sending communications machine of said communications capability of said transfer communication machine at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407.).

Regarding claim 100, see the rejection of corresponding claim 84. Further King '286 discloses notifying a sending communications machine of said communications capability of said transfer communication machine at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability

information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407.).

Further with respect to claims 82, 84, 90, 92, 98, and 100, King '286 discloses wherein a controlling mechanism configured to instruct said notifying mechanism to notify said sending communications machine of said communications capability at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407.).

.....

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 8, 9, 30, 31, 52, 53, and 107 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6529286 to King further in view of U.S. Patent No. 5552901 to Kikuchi et al.

Regarding claims 8, 30, and 52, Shima discloses a communications terminal apparatus comprising:

a communications mechanism configured to perform communications with a plurality of communications machines including a sending communications machine and a transfer communications machine (column 17, lines 14-26; column 18, lines 1-21; The Host reads on a sending machine, the high-function printer (figure 4) or reference 11 in figure 5 reads on the communication terminal apparatus, the low-function printers in Figure 4 or reference 13, 14 in Figure 5 read on transfer machines.);

a registering mechanism configured to register an address and a communications capability of said transfer communications machine (column 18, lines 59-67; column 33, lines 12-46; the file format reads on communication capability.);

a memory storing a set of image parameters (column 34, lines 2-8; The file formats as shown in Figure 25 reads on parameters for image data (JPG, GIF));

a notifying mechanism configured to notify of an enhancement communications capability of said apparatus in accordance with said communications capability of said transfer communications machine (Figure 12, 13; Host 54 is sending machine, 51 is communication terminal; 52, 53 ... are transfer machines; column 23, lines 61-67; column 24, lines 1-19; the attribute reads on capability; since printer 51 sends attributes of itself and the other printers the printer 51 attribute reads on "enhancement communications capability of said apparatus"); and

a controlling mechanism configured to instruct said notifying mechanism to notify said sending communications machine of said enhancement communications

capability (column 24, lines 13-34) and to instruct said communications mechanism to transfer image (column 12, lines 50-54) information received from said sending communications machine to said transfer communications machine using said address and said set of image parameters stored in said memory (column 24, lines 34-67; column 18, lines 59-67; column 33, lines 1-46), and

wherein the controlling mechanism determines whether the communication terminal apparatus has a communications capability to accept the image information from the sending communications machine, and does not transfer the image information to the transfer communications machine if the communication terminal apparatus has the communications capability to accept the image information (column 24, lines 40-46; column 25, lines 1-38); wherein said controlling mechanism is configured to obtain a latest communications capability through said communications mechanism when transferring said image information and to update said registration mechanism with said latest communications capability (column 23, lines 63-67; column 24, lines 1-11, 19-34; The attribute is checked at different time ("regular intervals") thus enabling of getting the latest communication capability from the printers. The attributes are stored (column 24, lines 27-28) which implies that registration is updated with the latest capability.).

However Shima '615 does not disclose wherein notifying communications capability is at a beginning of communications of image information

King '286 discloses wherein notifying communications capability is at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of

communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407).

Having the system of **Shima '615** and then given the well-established teaching of **King '286**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **King '286**, since **King '286** stated in col. 2, Lines 45-55, such a modification would provide a productive and optimized printing system.

However Shima '615 does not disclose wherein said set of image parameters stored in said memory and used along with said address to transfer said image information received from said sending communications machine to said transfer communications machine was received from said sending communications machine.

Kikuchi et al '901 discloses wherein said set of image parameters stored in said memory and used along with said address to transfer said image information received from said sending communications machine to said transfer communications machine was received from said sending communications machine (Figure 1, reference 1 fax server acts as a relay fax between client communication device 3(sending) and Remote Fax 9 (transfer device).; column 8, lines 30-54; Management section 10 stores the data format (image parameter) received from client device 3 in memory 27e. Further the parameter (27e) and address (27b) are used in transmitting to the remote fax 9 (column 10, lines 20-44)).).

Having the system of **Shima '615** and then given the well-established teaching of **Kikuchi et al '901**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **Kikuchi et al '901**, since **Kikuchi et al '901** stated in col. 10, Lines 32-39, such a modification would provide data communication for text and image formatted data.

Regarding claims 9, 31, and 53, Shima discloses a communications terminal apparatus comprising:

- a communications mechanism configured to perform communications with a plurality of communications machines including a sending communications machine and a transfer communications machine (see claim 8);

- a registering mechanism configured to register an address and a communications capability of said transfer communications machine(see claim 8);

- a memory storing a set of image parameters(see claim 8);

- a notifying mechanism configured to notify of an enhancement communications capability of said apparatus in accordance with said communications capability of said transfer communications machine(see claim 8); and

- a controlling mechanism configured to instruct said notifying mechanism to notify said sending communications machine of said enhancement communications capability and to instruct said communications mechanism to transfer image information received from said sending communications machine to said transfer communications machine using said address and said set of image parameters stored in said memory(see claim 8). Further Shima discloses obtaining capability at intervals of

a predetermined time period (column 24, lines 23-34); wherein said controlling mechanism is configured to obtain a latest communications capability through said communications mechanism when transferring said image information and to update said registration mechanism with said latest communications capability (column 23, lines 63-67; column 24, lines 1-11, 19-34; The attribute is checked at different time ("regular intervals") thus enabling of getting the latest communication capability from the printers. The attributes are stored (column 24, lines 27-28) which implies that registration is updated with the latest capability.).

However Shima '615 does not disclose wherein notifying communications capability is at a beginning of communications of image information

King '286 discloses wherein notifying communications capability is at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407).

Having the system of **Shima '615** and then given the well-established teaching of **King '286**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **King '286**, since **King '286** stated in col. 2, Lines 45-55, such a modification would provide a productive and optimized printing system.

However Shima '615 does not disclose wherein said set of image parameters stored in said memory and used along with said address to transfer said image information received from said sending communications machine to said transfer communications machine was received from said sending communications machine.

Kikuchi et al '901 discloses wherein said set of image parameters stored in said memory and used along with said address to transfer said image information received from said sending communications machine to said transfer communications machine was received from said sending communications machine (Figure 1, reference 1 fax server acts as a relay fax between client communication device 3(sending) and Remote Fax 9 (transfer device).; column 8, lines 30-54; Management section 10 stores the data format (image parameter) received from client device 3 in memory 27e. Further the parameter (27e) and address (27b) are used in transmitting to the remote fax 9 (column 10, lines 20-44)).).

Having the system of **Shima '615** and then given the well-established teaching of **Kikuchi et al '901**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **Kikuchi et al '901**, since **Kikuchi et al '901** stated in col. 10, Lines 32-39, such a modification would provide data communication for text and image formatted data.

Regarding claim 107, Shima '615 in view of Kikuchi et al '901 teaches all the limitations of claim 8. Further Shima '615 discloses wherein said controlling mechanism determines whether the communications terminal apparatus has the communications capability to accept said image information, and transfers said image information to said

transfer communications machine when the communications terminal apparatus does not have the communications capability to accept said image information (column 24, lines 46-60; When printer 51 (communications terminal apparatus) cannot execute the print job, it is transferred to other printers (printers 52, 53).).

13. Claims 13, 14, 35, 36, 57, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6529286 to King further in view of U.S. Patent No. 6816911 to Toyoda et al further in view of U.S. Patent No. 5552901 to Kikuchi et al.

Regarding claims 13, 35, and 57, Shima discloses a communications terminal apparatus comprising:

- a communications mechanism configured to perform communications with a plurality of communications machines including a sending communications machine and a transfer communications machine (see claim 8);

- a registering mechanism configured to register an address and a communications capability of said transfer communications machine (see claim 8);

- a memory storing a set of image parameters (see claim 8);

- a notifying mechanism configured to notify of an enhancement communications capability of said apparatus in accordance with said communications capability of said transfer communications machine (see claim 8); and

- a controlling mechanism configured to instruct said notifying mechanism to notify said sending communications machine of said enhancement communications capability and to instruct said communications mechanism to transfer image

information received from said sending communications machine to said transfer communications machine using said address and said set of image parameters stored in said memory (see claim 8).

However Shima '615 does not disclose wherein notifying communications capability is at a beginning of communications of image information.

King '286 discloses wherein notifying communications capability is at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407).

Having the system of **Shima '615** and then given the well-established teaching of **King '286**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **King '286**, since **King '286** stated in col. 2, Lines 45-55, such a modification would provide a productive and optimized printing system.

However Shima does not disclose wherein said controlling mechanism is configured to perform a retry call to said transfer communications machine upon a detection of an event indicating that said transfer communications machine is busy.

Toyoda et al discloses wherein said controlling mechanism is configured to perform a retry call to said transfer communications machine upon a detection of an

event indicating that said transfer communications machine is busy (column 5, lines 50-67).

Having the system of **Shima '615** and then given the well-established teaching of **Toyoda et al '911**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **Toyoda et al '911**, since **Toyoda et al '911** stated in col. 1, Lines 57-67, such a modification would provide an improved retrying method for facsimile communication.

However Shima '615 does not disclose wherein said set of image parameters stored in said memory and used along with said address to transfer said image information received from said sending communications machine to said transfer communications machine was received from said sending communications machine.

Kikuchi et al '901 discloses wherein said set of image parameters stored in said memory and used along with said address to transfer said image information received from said sending communications machine to said transfer communications machine was received from said sending communications machine (Figure 1, reference 1 fax server acts as a relay fax between client communication device 3(sending) and Remote Fax 9 (transfer device).; column 8, lines 30-54; Management section 10 stores the data format (image parameter) received from client device 3 in memory 27e. Further the parameter (27e) and address (27b) are used in transmitting to the remote fax 9 (column 10, lines 20-44)).).

Having the system of **Shima '615** and then given the well-established teaching of **Kikuchi et al '901**, it would have been obvious to one of ordinary skill in the art at the

time of the invention was made to modify the system of **Shima '615** as taught by **Kikuchi et al '901**, since **Kikuchi et al '901** stated in col. 10, Lines 32-39, such a modification would provide data communication for text and image formatted data.

Regarding claims 14, 36, and 58, Shima discloses a communications terminal apparatus comprising:

- a communications mechanism configured to perform communications with a plurality of communications machines including a sending communications machine and a transfer communications machine(see claim 8);

- a registering mechanism configured to register an address and a communications capability of said transfer communications machine(see claim 8);

- a memory storing a set of image parameters(see claim 8);

- a notifying mechanism configured to notify of an enhancement communications capability of said apparatus in accordance with said communications capability of said transfer communications machine(see claim 8); and

- a controlling mechanism configured to instruct said notifying mechanism to notify said sending communications machine of said enhancement communications capability and to instruct said communications mechanism to transfer image information received from said sending communications machine to said transfer communications machine using said address and said set of image parameters stored in said memory(see claim 8).

However Shima '615 does not disclose wherein notifying communications capability is at a beginning of communications of image information.

King '286 discloses wherein notifying communications capability is at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407).

Having the system of **Shima '615** and then given the well-established teaching of **King '286**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **King '286**, since **King '286** stated in col. 2, Lines 45-55, such a modification would provide a productive and optimized printing system.

However Shima does not disclose wherein said controlling mechanism is configured to perform a retry call at intervals of a predetermined time period to said transfer communications machine upon a detection of an event indicating that said transfer communications machine is busy.

Toyoda et al '911 discloses wherein said controlling mechanism is configured to perform a retry call at intervals of a predetermined time period to said transfer communications machine upon a detection of an event indicating that said transfer communications machine is busy (column 5, lines 50-67; column 1, lines 32-38).

Having the system of Shima '615 and then given the well-established teaching of Toyoda et al '911, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Shima '615 as taught by Toyoda

et al '911, since Toyoda et al '911 stated in col. 1, Lines 57-67, such a modification would provide an improved retrying method for facsimile communication.

However Shima '615 does not disclose wherein said set of image parameters stored in said memory and used along with said address to transfer said image information received from said sending communications machine to said transfer communications machine was received from said sending communications machine.

Kikuchi et al '901 discloses wherein said set of image parameters stored in said memory and used along with said address to transfer said image information received from said sending communications machine to said transfer communications machine was received from said sending communications machine (Figure 1, reference 1 fax server acts as a relay fax between client communication device 3(sending) and Remote Fax 9 (transfer device).; column 8, lines 30-54; Management section 10 stores the data format (image parameter) received from client device 3 in memory 27e. Further the parameter (27e) and address (27b) are used in transmitting to the remote fax 9 (column 10, lines 20-44)).).

Having the system of Shima '615 and then given the well-established teaching of Kikuchi et al '901, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Shima '615 as taught by Kikuchi et al '901, since Kikuchi et al '901 stated in col. 10, Lines 32-39, such a modification would provide data communication for text and image formatted data.

14. Claims 17, 20, 39, 42, 61, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6529286 to King further in view of U.S. Patent No. 6493103 to Toyoda et al.

Regarding claim 17, 39, and 61, Shima discloses a communications terminal apparatus comprising:

a communications mechanism configured to perform communications with a plurality of communications machines including a sending communications machine and a transfer communications machine(see claim 8);

a registering mechanism configured to register an address and a communications capability of said transfer communications machine(see claim 8);

a memory storing a set of image parameters(see claim 8);

a notifying mechanism configured to notify of an enhancement communications capability of said apparatus in accordance with said communications capability of said transfer communications machine(see claim 8); and

a controlling mechanism configured to instruct said notifying mechanism to notify said sending communications machine of said enhancement communications capability and to instruct said communications mechanism to transfer image information received from said sending communications machine to said transfer communications machine using said address and said set of image parameters stored in said memory(see claim 8).

However Shima '615 does not disclose wherein notifying communications capability is at a beginning of communications of image information.

King '286 discloses wherein notifying communications capability is at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407).

Having the system of **Shima '615** and then given the well-established teaching of **King '286**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **King '286**, since **King '286** stated in col. 2, Lines 45-55, such a modification would provide a productive and optimized printing system.

However Shima does not disclose wherein said controlling mechanism is configured to transfer said image information through E-mail to said transfer communications machine.

Toyoda et al '103 discloses wherein said controlling mechanism is configured to transfer said image information through E-mail to said transfer communications machine (column 22, lines 5-10, lines 31-33, lines 48-61).

Having the system of **Shima '615** and then given the well-established teaching of **Toyoda et al '103**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **Toyoda et al '103**, since **Toyoda et al '103** stated in col. 22, Lines 58-61, such a

modification would provide the option of using e-mail for transferring data which is useful since image data can be compressed in e-mail format.

Regarding claims 20, 42, and 64, Shima in view of Toyoda et al '103 teach all the limitations of claims 17, 39, and 61 respectively. Toyoda et al '103 further disclose an apparatus and method, wherein said controlling mechanism is configured to add a literal identification of said image information to said E-mail (Toyoda et al: column 22, lines 53-58).

15. Claims 21, 43, 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6529286 to King further in view of U.S. Patent No. 6333789 to Shima further in view of U.S. Patent No. 5552901 to Kikuchi et al.

Regarding claims 21, 43, and 65, Shima discloses a communications terminal apparatus comprising:

- a communications mechanism configured to perform communications with a plurality of communications machines including a sending communications machine and a transfer communications machine(see claim 8);

- a registering mechanism configured to register an address and a communications capability of said transfer communications machine(see claim 8);

- a memory storing a set of image parameters(see claim 8);

- a notifying mechanism configured to notify of an enhancement communications capability of said apparatus in accordance with said communications capability of said transfer communications machine(see claim 8); and

a controlling mechanism configured to instruct said notifying mechanism to notify said sending communications machine of said enhancement communications capability and to instruct said communications mechanism to transfer image information received from said sending communications machine to said transfer communications machine using said address and said set of image parameters stored in said memory(see claim 8).

However Shima '615 does not disclose wherein notifying communications capability is at a beginning of communications of image information.

King '286 discloses wherein notifying communications capability is at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407).

Having the system of **Shima '615** and then given the well-established teaching of **King '286**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **King '286**, since **King '286** stated in col. 2, Lines 45-55, such a modification would provide a productive and optimized printing system.

However Shima does not disclose wherein said controlling mechanism is configured to transfer said image information with a predetermined identification code causing said transfer communications machine to reproduce an output of

said image information into a predetermined recording sheet tray corresponding to said predetermined identification code.

Shima '789 discloses wherein said controlling mechanism is configured to transfer said image information with a predetermined identification code causing said transfer communications machine to reproduce an output of said image information into a predetermined recording sheet tray corresponding to said predetermined identification code (column 10, lines 18-29, 52-57; The print data (image information) contains code which determines which output tray the print output will go.).

Having the system of **Shima '615** and then given the well-established teaching of **Shima '789**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615e** as taught by **Shima '789**, since **Shima '789** stated in col. 10, Lines 29-36, such a modification would provide for priority in the output of print data by using specific tray (column 10, lines 29-36).

However Shima '615 does not disclose wherein said set of image parameters stored in said memory and used along with said address to transfer said image information received from said sending communications machine to said transfer communications machine was received from said sending communications machine.

Kikuchi et al '901 discloses wherein said set of image parameters stored in said memory and used along with said address to transfer said image information received from said sending communications machine to said transfer communications machine was received from said sending communications machine (Figure 1, reference 1 fax server acts as a relay fax between client communication device 3(sending) and Remote

Fax 9 (transfer device).; column 8, lines 30-54; Management section 10 stores the data format (image parameter) received from client device 3 in memory 27e. Further the parameter (27e) and address (27b) are used in transmitting to the remote fax 9 (column 10, lines 20-44)).).

Having the system of **Shima '615** and then given the well-established teaching of **Kikuchi et al '901**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **Kikuchi et al '901**, since **Kikuchi et al '901** stated in col. 10, Lines 32-39, such a modification would provide data communication for text and image formatted data.

16. Claims 19, 41, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6529286 to King further in view of U.S. Patent No. 5552901 to Kikuchi et al further in view of U.S. Patent No. 5818609 to Yamamuro.

Regarding claims 19, 41, and 63, Shima in view of King '286 further in view of Kikuchi et al '901 teach all the limitations of claims 8, 30, and 52 respectively. However Shima in view of Kikuchi et al '901 does not disclose an apparatus and method wherein said controlling mechanism is configured to determine whether said latest communications capability is sufficient to receive said image information and stops receiving said image information from said sending communications machine when said latest communications capability is determined as not sufficient to receive said image information.

Yamamuro '609 discloses an apparatus and method wherein said controlling mechanism is configured to determine whether said latest communications capability is sufficient to receive said image information (Yamamuro: column 4, lines 20-24) and stops receiving said image information from said sending communications machine when said latest communications capability is determined as not sufficient to receive said image information (Yamamuro: column 4, lines 28-37).

Having the system of Shima in view of King '286 further in view of Kikuchi et al '901 and then given the well-established teaching of **Yamamuro '609**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Shima in view of King '286 further in view of Kikuchi et al '901 as taught by **Yamamuro '609**, since **Yamamuro '609** stated in col. 1, Lines 23-43, such a modification would provide an efficient method for transferring image data (column 1, lines 23-43).

17. Claims 85, 86, 93, 94, 101, and 102 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6529286 to King further in view of U.S. Patent No. 6816911 to Toyoda et al.

Regarding claim 85, Shima discloses a communications terminal apparatus comprising:

a communications mechanism configured to perform communications with a plurality of communications machines including a sending communications machine and a transfer communications machine (column 17, lines 14-26; column 18, lines 1-21; The Host reads on a sending machine, the high-function printer (figure 4) or

reference 11 in figure 5 reads on the communication terminal apparatus, the low-function printers in Figure 4 or reference 13, 14 in Figure 5 read on transfer machines.);

a registering mechanism configured to register an address and a communications capability of said transfer communications machine (column 18, lines 59-67; "IP address"; column 23, lines 61-67; column 24, lines 1-9; The printer 51 stores the setting information (i.e. registering) of transfer communication machines (printers 52, 53,) which reads on communication capability of printers (52, 53, ...));

a notifying mechanism configured to notify of said communications capability of said transfer communications machine registered in said registering mechanism; (Figure 12, 13; Host 54 is sending machine, 51 is communication terminal apparatus; 52, 53 ... are transfer machines; column 23, lines 61-67; column 24, lines 1-19; the attribute reads on capability; since printer 51 sends attributes of the other printers to the host ("sending machine") the communication capability of the transfer machines are notified to the host. Thus the host is notified of the attributes of the other transfer printers 52, 53...);
and

a controlling mechanism (column 23, lines 47-52; "first processing function" reads on mechanism for notifying sending ("host") machine.) configured to instruct said notifying mechanism to notify said sending communications machine of said communications capability (column 24, lines 13-34) and to instruct said communications mechanism to transfer image information (column 12, lines 50-64) received from said sending communications machine to said transfer communications machine using said address stored in said registering mechanism

(column 24, lines 40-60; column 18, lines 59-67; "IP address"; column 19, lines 1-8; The printer 51 transfers print data from host 54 ("sending machine") to transfer printers 52, 53,....).

However Shima '615 does not disclose wherein notifying communications capability is at a beginning of communications of image information.

King '286 discloses wherein notifying communications capability is at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407).

Having the system of **Shima '615** and then given the well-established teaching of **King '286**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **King '286**, since **King '286** stated in col. 2, Lines 45-55, such a modification would provide a productive and optimized printing system.

However Shima does not disclose wherein said controlling mechanism is configured to perform a retry call to said transfer communications machine upon a detection of an event indicating that said transfer communications machine is busy.

Toyoda et al '911 discloses wherein said controlling mechanism is configured to perform a retry call to said transfer communications machine upon a detection of an event indicating that said transfer communications machine is busy (column 5, lines 50-

67; The control 39 reads on controlling mechanism. The facsimile 7 of the destination is the transfer communication machine.).

Having the system of **Shima '615** and then given the well-established teaching of **Toyoda et al '911**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **Toyoda et al '911**, since **Toyoda et al '911** stated in col. 1, Lines 57-67, such a modification would provide an improved retrying method for facsimile communication.

Regarding claim 93, see rejection of claim 85 as shown above.

Regarding claim 86, see rejection of claims 85 and 93 as shown above. Further Toyoda et al discloses wherein said controlling mechanism is configured to perform a retry call at intervals of a predetermined time period to said transfer communications machine upon a detection of an event indicating that said transfer communications machine is busy (column 5, lines 50-67; column 1, lines 32-38).

Regarding claim 94, see rejection of claim 86 as shown above.

Regarding claim 101, see rejection of claims 85 as shown above.

Regarding claim 102, see rejection of claim 86 as shown above.

Further with respect to claims 85, 86, 93, 94, 101, and 102, King '286 discloses wherein a controlling mechanism configured to instruct said notifying mechanism to notify said sending communications machine of said communications capability at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives

the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407.).

18. Claims 87, 88, 95, 96, 103, and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6529286 to King further in view of U.S. Patent No. 6493103 to Toyoda et al.

Regarding claim 87, Shima discloses a communications terminal apparatus comprising:

a communications mechanism configured to perform communications with a plurality of communications machines including a sending communications machine and a transfer communications machine(column 17, lines 14-26; column 18, lines 1-21; The Host reads on a sending machine, the high-function printer (figure 4) or reference 11 in figure 5 reads on the communication terminal apparatus, the low-function printers in Figure 4 or reference 13, 14 in Figure 5 read on transfer machines.);

a registering mechanism configured to register an address and a communications capability of said transfer communications machine(column 18, lines 59-67; "IP address"; column 23, lines 61-67; column 24, lines 1-9; The printer 51 stores the setting information (i.e. registering) of transfer communication machines (printers 52, 53, ...) which reads on communication capability of printers (52, 53, ...));

a notifying mechanism configured to notify of said communications capability of said transfer communications machine registered in said registering mechanism (Figure 12, 13; Host 54 is sending machine, 51 is communication terminal apparatus; 52, 53 ... are transfer machines; column 23, lines 61-67; column 24, lines 1-19; the attribute reads on

capability; since printer 51 sends attributes of the other printers to the host ("sending machine") the communication capability of the transfer machines are notified to the host. Thus the host is notified of the attributes of the other transfer printers 52, 53...); and

a controlling mechanism (column 23, lines 47-52; "first processing function" reads on mechanism for notifying sending ("host") machine.) configured to instruct said notifying mechanism to notify said sending communications machine of said enhancement communications capability (column 24, lines 13-34) and to instruct said communications mechanism to transfer image information (column 12, lines 50-64) received from said sending communications machine to said transfer communications machine using said address stored in said registering mechanism (column 24, lines 40-60; column 18, lines 59-67; "IP address"; column 19, lines 1-8; The printer 51 transfers print data from host 54 ("sending machine") to transfer printers 52, 53,...).

However Shima '615 does not disclose wherein notifying communications capability is at a beginning of communications of image information.

King '286 discloses wherein notifying communications capability is at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407).

Having the system of **Shima '615** and then given the well-established teaching of **King '286**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **King '286**, since **King '286** stated in col. 2, Lines 45-55, such a modification would provide a productive and optimized printing system.

However Shima does not disclose wherein said controlling mechanism is configured to transfer said image information through E-mail to said transfer communications machine.

Toyoda et al discloses wherein said controlling mechanism is configured to transfer said image information through E-mail to said transfer communications machine (column 21, lines 21-63; CPU 80 is the controlling mechanism; column 22, lines 5-10, lines 31-33, lines 48-61; computer 64 reads on transfer communications machine; Facsimile 71 transfers image data to computer 64 by email.).

Having the system of **Shima '615** and then given the well-established teaching of **Toyoda et al '103**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **Toyoda et al '103**, since **Toyoda et al '103** stated in col. 22, Lines 58-61, such a modification would provide option of using e-mail for transferring data which is useful since image data can be compressed in e-mail format .

Regarding claim 88, Shima in view of Toyoda et al teach all the limitations of claims 87, 95, and 103 respectively. Toyoda et al further disclose an apparatus and method, wherein said controlling mechanism is configured to add a literal identification

of said image information to said E-mail (Toyoda et al: column 22, lines 53-58; The user's name, facsimile number read on literal identification.).

Regarding claim 95, see rejection of claim 87 as shown above.

Regarding claim 96, see rejection of claim 88 as shown above.

Regarding claim 103, see rejection of claim 87 as shown above. Further King '286 discloses notifying a sending communications machine of said communications capability of said transfer communication machine at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407.).

Regarding claim 104, see rejection of claim 88 as shown above.

Further with respect to claims 87, 88, 95, 96, 103, and 104, King '286 discloses wherein a controlling mechanism configured to instruct said notifying mechanism to notify said sending communications machine of said communications capability at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407.).

19. Claims 89, 97, and 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6529286 to King further in view of U.S. Patent No. 6333789 to Shima.

Regarding claim 89, Shima '615 discloses a communications terminal apparatus comprising:

a communications mechanism configured to perform communications with a plurality of communications machines including a sending communications machine and a transfer communications machine(column 17, lines 14-26; column 18, lines 1-21; The Host reads on a sending machine, the high-function printer (figure 4) or reference 11 in figure 5 reads on the communication terminal apparatus, the low-function printers in Figure 4 or reference 13, 14 in Figure 5 read on transfer machines.);

a registering mechanism configured to register an address and a communications capability of said transfer communications machine(column 18, lines 59-67; "IP address"; column 23, lines 61-67; column 24, lines 1-9; The printer 51 stores the setting information (i.e. registering) of transfer communication machines (printers 52, 53,) which reads on communication capability of printers (52, 53, ...)

a notifying mechanism configured to notify of said communications capability of said transfer communications machine registered in said registering mechanism (Figure 12, 13; Host 54 is sending machine, 51 is communication terminal apparatus; 52, 53 ... are transfer machines; column 23, lines 61-67; column 24, lines 1-19; the attribute reads on capability; since printer 51 sends attributes of the other printers to the host ("sending machine") the communication capability of the transfer machines are notified to the

host. Thus the host is notified of the attributes of the other transfer printers 52, 53...);
and

a controlling mechanism (column 23, lines 47-52; "first processing function" reads on mechanism for notifying sending ("host") machine.) configured to instruct said notifying mechanism to notify said sending communications machine of said communications capability (column 24, lines 13-34) and to instruct said communications mechanism to transfer image information (column 12, lines 50-64) received from said sending communications machine to said transfer communications machine using said address stored in said registering mechanism (column 24, lines 40-60; column 18, lines 59-67; column 19, lines 1-8; The printer 51 transfers print data from host 54 ("sending machine") to transfer printers 52, 53,...;).

However Shima '615 does not disclose wherein notifying communications capability is at a beginning of communications of image information.

King '286 discloses wherein notifying communications capability is at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407.).

Having the system of **Shima '615** and then given the well-established teaching of **King '286**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **King '286**, since

King '286 stated in col. 2, Lines 45-55, such a modification would provide a productive and optimized printing system.

However Shima '615 does not disclose wherein said controlling mechanism is configured to transfer said image information with a predetermined identification code causing said transfer communications machine to reproduce an output of said image information into a predetermined recording sheet tray corresponding to said predetermined identification code.

Shima '789 discloses wherein said controlling mechanism is configured to transfer said image information with a predetermined identification code causing said transfer communications machine to reproduce an output of said image information into a predetermined recording sheet tray corresponding to said predetermined identification code (column 10, lines 18-29, 52-57; The print data (image information) contains code which determines which output tray the print output will go.).

Having the system of **Shima '615** and then given the well-established teaching of **Shima '789**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Shima '615** as taught by **Shima '789**, since **Shima '789** stated in col. 10, Lines 29-36, such a modification would provide for priority in the output of print data by using specific tray.

Regarding claim 97, see rejection of claim 89 as shown above.

Regarding claim 105, see rejection of claim 89 as shown above. Further King '286 discloses notifying a sending communications machine of said communications capability of said transfer communication machine at a beginning of communications of

image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407.).

Further with respect to claims 89, 97, and 105, King '286 discloses wherein a controlling mechanism configured to instruct said notifying mechanism to notify said sending communications machine of said communications capability at a beginning of communications of image information (column 4, lines 40-41; column 5, lines 26-45; column 6, lines 1-31; In step s402 print job is submitted which is beginning of communications of image information; In step s405-s407, the DDSPI 23 unit receives the printer capability information from all the printers in the list. The DDSPI 23 is notified of the capability information at step s407.).

20. Claims 83, 91, and 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6529286 to King further in view of U.S. Patent No. 5818609 to Yamamuro.

Regarding claim 83, Shima in view of King '286 teaches all the limitations of claims 82, 90, and 98 respectively. However Shima in view of King '286 does not disclose an apparatus and method wherein said controlling mechanism is configured to determine whether said latest communications capability is sufficient to receive said image information and stops receiving said image information from said sending

communications machine when said latest communications capability is determined as not sufficient to receive said image information.

Yamamuro discloses an apparatus and method wherein said controlling mechanism is configured to determine whether said latest communications capability is sufficient to receive said image information (Yamamuro: column 4, lines 20-24; Figure 1, reference 13 "host" reads on sending machine; The checking of the availability of network 14, memory 8 and the bus read on sufficient capability for communication.) and stops receiving said image information from said sending communications machine when said latest communications capability is determined as not sufficient to receive said image information (Yamamuro: column 4, lines 28-37; When "not ready" (ie. Not sufficient). The busy signal means that the image is not going to be received (ie. Stop receiving)).

Having the system of ***Shima '615 in view of King '286*** and then given the well-established teaching of ***Yamamuro '609***, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of ***Shima '615 in view of King '286*** as taught by ***Yamamuro '609***, since ***Yamamuro '609*** stated in col. 1, Lines 23-43, such a modification would provide an efficient method for transferring image data.

Regarding claim 91, see rejection of claim 83 as shown above.

Regarding claim 99, see rejection of claim 83 as shown above.

21. Claim 106 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6529286 to King further in view

of U.S. Patent No. 5552901 to Kikuchi et al further in view of U.S. Patent No. 6801341 to Joffe et al.

Regarding claim 106, Shima '615 in view of King '286 further in view of Kikuchi et al '901 teaches all the limitations of claim 8. Further Kikuchi et al '901 discloses said image parameters stored in said memory (column 8, lines 30-54; Management section 10 stores the data format (image parameter) received from client device 3 in memory 27e. Further the parameter (27e) and address (27b) are used in transmitting to the remote fax 9 (column 10, lines 20-44)).). However Kikuchi et al '901 does not disclose wherein said communications terminal apparatus converts image parameters according to a type of said transfer communications machine to which image information is transferred and transfers the image information using the converted image parameter.

Joffe et al '341 discloses wherein said communications terminal apparatus converts image parameters according to a type of said transfer communications machine to which image information is transferred and transfers the image information using the converted image parameter (column 10, lines 25-35; protocol conversion used for transmission).

Having the system of ***Shima '615 in view of King '286 further in view of Kikuchi et al '901*** and then given the well-established teaching of ***Joffe et al '341***, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of ***Shima '615 in view of King '286 further in view of Kikuchi et al '901*** as taught by ***Joffe et al '341***, since ***Joffe et al '341*** stated in col. 9,

Lines 14-22, such a modification would provide efficiency and improve speed of data communication for different protocol system.

22. Claim 108 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6940615 to Shima in view of U.S. Patent No. 6529286 to King further in view of U.S. Patent No. 5552901 to Kikuchi et al further in view of U.S. Patent No. 6816911 to Toyoda et al.

Regarding claim 108, Shima '615 in view of King '286 further in view of Kikuchi et al '901 teaches all the limitations of claim 107. However Shima '615 in view of King '286 further in view of Kikuchi et al '901 does not disclose the communications terminal apparatus as defined in claim 107, wherein if said communications capability of said transfer communications machine is insufficient for receiving the image information, said controlling mechanism is configured to enter a waiting mode and to initiate communications to said transfer communications machine at intervals of a predetermined time period until said controlling mechanism obtains from said transfer communications machine a latest communications capability that is determined as sufficient for the transfer of said image information to said transfer communications machine.

Toyoda et al '911 disclose wherein if said communications capability of said transfer communications machine is insufficient for receiving the image information, said controlling mechanism is configured to enter a waiting mode and to initiate communications to said transfer communications machine at intervals of a predetermined time period (column 1, lines 32-37) until said controlling mechanism

obtains from said transfer communications machine a latest communications capability that is determined as sufficient for the transfer of said image information to said transfer communications machine (column 5, lines 50-67; column 6, lines 1-15; When destination is busy (insufficient capability), the retry is repeated until success in retry as shown in Figure 5, steps st416 ("Yes") which is sufficient capability.).

Having the system of ***Shima '615 in view of King '286 further in view of Kikuchi et al '901*** and then given the well-established teaching of ***Toyoda et al '911***, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of ***Shima '615 in view of King '286 further in view of Kikuchi et al '901*** as taught by ***Toyoda et al '911***, since ***Toyoda et al '911*** stated in col. 1, Lines 57-67, such a modification would provide an improved retrying method for facsimile communication.

Other Prior Art Cited

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6256114 to Yoshikawa discloses communication system.

JP 02-301265 to Nakamura discloses facsimile system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENIYAM MENBERU whose telephone number is (571) 272-7465. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600. The group receptionist number for TC 2600 is (571) 272-2600.

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Application/Control Number: 09/881,402
Art Unit: 2625

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